

## Academic Map: Mathematics, UCA STEMteach Mathematics Education

**Department:** Mathematics      **Degree:** BS  
**Program/Major:** Mathematics  
**Track/Emphasis:** UCA STEMteach Mathematics Education  
**Does this program require a minor? (Yes/No)** Yes

### Important program information in the online *Undergraduate Bulletin*:

**UCA Core Requirements:** <http://uca.edu/ubulletin2015/general-policies-information/uca-core/>  
**LD Core Check Sheet:** <http://uca.edu/ubulletin/ldcore/>  
**Degree Requirements:** <http://uca.edu/ubulletin2015/general-policies-information/degree-requirements/>  
**Program Description:** <http://uca.edu/ubulletin2015/colleges-departments-programs/college-of-natural-sciences-and-mathematics/departments-of-mathematics/>  
**Course Descriptions:** <http://uca.edu/ubulletin2015/courses/>

This degree program requires a total of **120 semester credit hours**, including at least **40 upper-division credit hours**.

Comparable courses in the Arkansas Course Transfer System (ACTS) are cross-referenced in the ACTS column of each semester block below; a [core link](http://uca.edu/ubulletin/ldcore/) (http://uca.edu/ubulletin/ldcore/) takes the user to the *Undergraduate Bulletin's* UCA Lower-Division Core check sheet, where UCA Core options and ACTS course numbers are listed in full; an [acts link](http://uca.edu/ubulletin/arkansas-course-transfer-system/) takes the user to the *Undergraduate Bulletin's* ACTS page (http://uca.edu/ubulletin/arkansas-course-transfer-system/) for additional information and a UCA-ACTS crosswalk.

### Year 1

#### Fall – Semester 1 (credit hours: 14)

SUBJ	NUM	TITLE	SCH	ACTS
MATH	1496	Calculus I	4	<a href="#">MATH2405</a>
WRTG	1310	Introduction to College Writing or Approved alternative (LD UCA Core: Writing Foundation) <sup>1</sup>	3	<a href="#">ENGL1013 core link</a>
		LD UCA Core <sup>1</sup>	3	<a href="#">core link</a>
		LD UCA Core <sup>1</sup>	3	<a href="#">core link</a>
EDUC	1100	Inquiry Approaches to Teaching (UCA STEMteach) <sup>2</sup>	1	

#### Spring – Semester 2 (credit hours: 15)

SUBJ	NUM	TITLE	SCH	ACTS
MATH	1497	Calculus II	4	<a href="#">MATH2505</a>
WRTG ENGL	1320 1320	Academic Writing and Research or Interdisciplinary Writing and Research or Other approved alternative (LD UCA Core: Research/Writing) <sup>1</sup>	3	<a href="#">ENGL1023 ENGL1023 core link</a>
		LD UCA Core <sup>1</sup>	3	<a href="#">core link</a>
		LD UCA Core (Natural Sciences) <sup>1</sup>	4	<a href="#">core link</a>
EDUC	1101	Inquiry Based Lesson Design (UCA STEMteach) <sup>2</sup>	1	

**Year 2****Fall – Semester 3 (credit hours: 15)**

SUBJ	NUM	TITLE	SCH	ACTS
MATH	2335	Transition to Advanced Mathematics	3	
MATH	2471	Calculus III	4	<a href="#">MATH2603</a>
EDUC	1301	Knowing and Learning (UCA STEMteach) <sup>2</sup>	3	
		LD UCA Core (Natural Sciences) <sup>1</sup>	4	<a href="#">core link</a>
		General Elective	1	

**Spring – Semester 4 (credit hours: 16)**

SUBJ	NUM	TITLE	SCH	ACTS
MATH	2441	Mathematical Computation	4	
MATH	3320	Linear Algebra (UD UCA Core: I)	3	
MATH	3354 2330	Concepts of Discrete Math or Discrete Structures I	3	
		LD UCA Core <sup>1</sup>	3	<a href="#">core link</a>
EDUC	2301	Classrooms Interactions (UCA STEMteach) <sup>2</sup>	3	

**Year 3****Fall – Semester 5 (credit hours: 15)**

SUBJ	NUM	TITLE	SCH	ACTS
MATH	4371	Introduction to Probability (UD UCA Core: R)	3	
		MATH Major Elective, upper-division	3	
		LD UCA Core <sup>1</sup>	3	<a href="#">core link</a>
MATH	4313	Function and Modeling	3	
EDUC	3300	Project-Based Instruction (UCA STEMteach) <sup>2</sup>	3	

**Spring – Semester 6 (credit hours: 15)**

SUBJ	NUM	TITLE	SCH	ACTS
MATH	4372 3311	Introduction to Statistical Inference Statistical Methods II	3	
MATH	4345	College Geometry	3	
		LD UCA Core <sup>1</sup>	3	<a href="#">core link</a>
		LD UCA Core <sup>1</sup>	3	<a href="#">core link</a>
MATH	3370	Mathematics in Secondary Schools	3	

**Year 4****Fall – Semester 7 (Credit hours: 15)**

SUBJ	NUM	TITLE	SCH	ACTS
MATH	4301	Secondary Mathematics Methods (UD UCA Core: C)	3	
MATH	3360	Introduction to Rings and Fields	3	
STEM	3310	Research Method and Math and Science (UCA STEMteach) <sup>2</sup>	3	
		General Elective	3	

SUBJ	NUM	TITLE	SCH	ACTS
		General Elective	3	

**Spring – Semester 8 (Credit hours: 15)**

SUBJ	NUM	TITLE	SCH	ACTS
		General Elective	3	
STEM	3305	Perspectives on Mathematics and Science (UCA STEMteach) <sup>2</sup>	3	
STEM	4305	Apprentice Teaching Seminar (UCA STEMteach) <sup>2</sup>	3	
STEM	4600	Apprentice Teaching (UCA STEMteach) <sup>2</sup>	6	

\_\_\_\_\_  
SIGNED – DEPARTMENT CHAIR

\_\_\_\_\_  
DATE

\_\_\_\_\_  
SIGNED – COLLEGE DEAN

\_\_\_\_\_  
DATE

**To be completed by the advisor when an Eight-Semester plan is accepted by the student:**

**If applicable, has student selected a minor? Type “x” as appropriate.** \_\_\_\_\_ No  Yes

**If “yes,” specify:** UCA STEMteach

**Notes**

<sup>1</sup> See appropriate choices, alternatives, or substitutions under “UCA Core” in the *Undergraduate Bulletin*. Prior to completion of 30 semester hours, a student must complete a UCA Core course designated as a First-Year Seminar (FYS) in Critical Inquiry, Diversity, or Responsible Living. The student will also need to complete major, minor, or general elective courses designated as fulfilling the upper-division and capstone requirements of the UCA Core. See annotations in this Academic Map for courses in the major that will fulfill these requirements; for others, consult the *Undergraduate Bulletin* and your academic advisor.

<sup>2</sup> This Academic Map includes the 26 credit hours of the UCA STEMteach minor.